

1  
IL-174-40

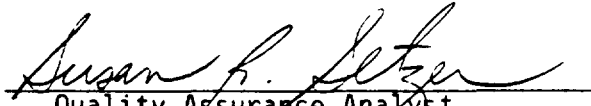
157702

QUALITY ASSURANCE NOTICE

RECEIVED OCT 2 5 1983

CC# 5812

Due to magnetic tape failure the library searches for  
FSCC scans # 1433 and # 1154 are not available.

  
Quality Assurance Analyst

RECEIVED OCT 2 5 1983

Case 1287

CASE SUMMARY--CASE #1887

The following Quality Assurance Notices apply to Case #1887:

QUALITY ASSURANCE NOTICE

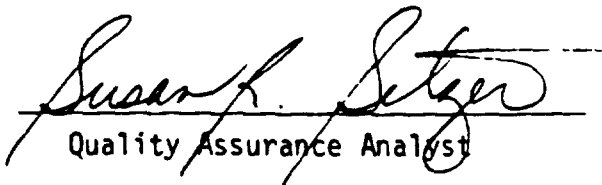
Semivolatile sample # 5801 required a substantial dilution in order to accurately detect and quantify compounds present at high levels. Because of this dilution factor, the level of surrogates in this sample fell below the detection limit, and are therefore reported as "BDL."

Bob Whitehead  
Quality Assurance Specialist

QUALITY ASSURANCE NOTICE

*cc #5801 - volatile*

Due to background interference in this sample some of the surrogate recoveries are outside the control limits.

  
Quality Assurance Analyst

RECEIVED 001 2 5 1983

# QUALITY ASSURANCE NOTICE

The statements checked below apply to the pesticide fraction of sample # 5501. These statements apply to problems incurred with the quantitation of the surrogate, dibutyl chlorendate, or the spike compounds (QC samples only) flagged by an asterisk (\*) on the compound list.

- ☐ No DBC recovery available due to a \_\_\_\_\_ dilution factor.
- ☐ No spike recovery available due to a \_\_\_\_\_ dilution factor.
- ☐ No spike recovery available due to severe matrix interference and/or the presence of high levels of PCBs which prevent quantitation of these compounds.
- ☐ No DBC recovery due to severe matrix interference.
- ☐ Variations between duplicate samples due to non-homogenous nature of soil sample.
- ☒ No DBC recovery due to 100:1 dilution factor on packed/capillary (circle) and matrix interference on packed/capillary columns (circle).
- ☐ Low/high (circle) spike recoveries due to matrix interference.
- ☐ Additional Analyst/Quality Assurance Specialist comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

initials SK

date 1-27-83

RECEIVED OCT 25 1983

# QUALITY ASSURANCE NOTICE

The statements checked below apply to the pesticide fraction of sample # 5802. These statements apply to problems incurred with the quantitation of the surrogate, dibutyl chlorendate, or the spike compounds (QC samples only) flagged by an asterisk (\*) on the compound list.

- ☐ No DBC recovery available due to a \_\_\_\_\_ dilution factor.
- ☐ No spike recovery available due to a \_\_\_\_\_ dilution factor.
- ☐ No spike recovery available due to severe matrix interference and/or the presence of high levels of PCBs which prevent quantitation of these compounds.
- ☐ No DBC recovery due to severe matrix interference.
- ☐ Variations between duplicate samples due to non-homogenous nature of soil sample.
- ☒ No DBC recovery due to 100:1 dilution factor on packed/capillary (circle) and matrix interference on packed/capillary columns (circle).
- ☐ Low/high (circle) spike recoveries due to matrix interference.
- ☐ Additional Analyst/Quality Assurance Specialist comments:

initials JS

date 7/27/83

RECEIVED OCT 2 5 1983

# QUALITY ASSURANCE NOTICE

Semivolatile sample # 5802 required a substantial dilution in order to accurately detect and quantify compounds present at high levels. Because of this dilution factor, the level of surrogates in this sample fell below the detection limit, and are therefore reported as "BDL."

Bob Whitehead  
Quality Assurance Specialist  
Case 1887

QUALITY ASSURANCE NOTICE


Semivolatile sample # 5803 required a substantial dilution in order to accurately detect and quantify compounds present at high levels. Because of this dilution factor, the level of surrogates in this sample fell below the detection limit, and are therefore reported as "BDL."

Bob Whitehead  
Quality Assurance Specialist

QUALITY ASSURANCE NOTICE

CC # 5803

The surrogate recoveries for the volatile portion of this sample are outside the quality control limits. However, due to insufficient sample remaining, re-analysis could not be performed. The original data is therefore reported.

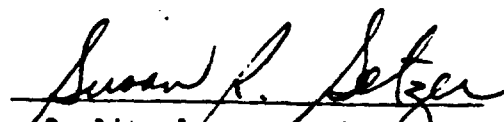
  
Quality Assurance Analyst

RECEIVED OCT 2 5 1983

QUALITY ASSURANCE NOTICE

CC # 5803

Due to insufficient sample remaining, the dry weight portion of this sample was not analyzed.

  
Quality Assurance Analyst

# QUALITY ASSURANCE NOTICE

The statements checked below apply to the pesticide fraction of sample # 5803. These statements apply to problems incurred with the quantitation of the surrogate, dibutyl chlorendate, or the spike compounds (QC samples only) flagged by an asterisk (\*) on the compound list.

- ☐ No DBC recovery available due to a \_\_\_\_\_ dilution factor.
- ☐ No spike recovery available due to a \_\_\_\_\_ dilution factor.
- ☐ No spike recovery available due to severe matrix interference and/or the presence of high levels of PCBs which prevent quantitation of these compounds.
- ☒ No DBC recovery due to severe matrix interference.
- ☐ Variations between duplicate samples due to non-homogenous nature of soil sample.
- ☐ No DBC recovery due to \_\_\_\_\_ dilution factor on packed/capillary (circle) and matrix interference on packed/capillary columns (circle).
- ☐ Low/high (circle) spike recoveries due to matrix interference.
- ☐ Additional Analyst/Quality Assurance Specialist comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

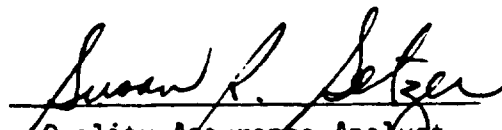
initials SES

date 9/27/83

RECEIVED OCT 2 5 1983

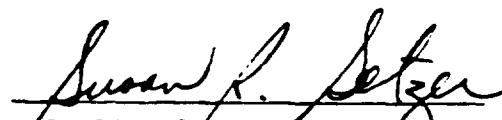
QUALITY ASSURANCE NOTICE  
CC #5804

Due to insufficient sample remaining, the dry weight portion of this sample was not analyzed.

  
Quality Assurance Analyst

QUALITY ASSURANCE NOTICE  
CC #5806

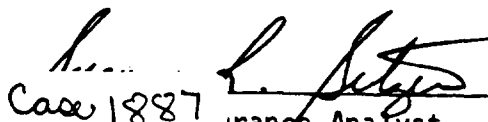
Due to insufficient sample remaining, the pesticide portion of this sample was not analyzed.

  
Quality Assurance Analyst

QUALITY ASSURANCE NOTICE  
CC #5806

RECEIVED OCT 25 1983

The surrogate recoveries for the semi-volatile portion of this sample are outside the quality control limits. However, due to insufficient sample remaining, re-analysis could not be performed. The original data is therefore reported.

  
Case 1887  
Quality Assurance Analyst

QUALITY ASSURANCE NOTICE

The statements checked below apply to the pesticide fraction of sample # SECS. These statements apply to problems incurred with the quantitation of the surrogate, dibutyl chlorendate, or the spike compounds (QC samples only) flagged by an asterisk (\*) on the compound list.

- ☐ No DBC recovery available due to a \_\_\_\_\_ dilution factor.
- ☐ No spike recovery available due to a \_\_\_\_\_ dilution factor.
- ☐ No spike recovery available due to severe matrix interference and/or the presence of high levels of PCBs which prevent quantitation of these compounds.
- ☐ No DBC recovery due to severe matrix interference.
- ☐ Variations between duplicate samples due to non-homogenous nature of soil sample.
- ☒ No DBC recovery due to 2:1 dilution factor on packed/capillary (circle) and matrix interference on packed/capillary columns (circle).
- ☐ Low/high (circle) spike recoveries due to matrix interference.
- ☐ Additional Analyst/Quality Assurance Specialist comments:

initials SES

date 9-27-83

RECEIVED OCT 2 5 1983

Case 1287



QUALITY ASSURANCE NOTICE

Semivolatile sample # 5808 required a substantial dilution in order to accurately detect and quantify compounds present at high levels. Because of this dilution factor, the level of surrogates in this sample fell below the detection limit, and are therefore reported as "BDL."

Bob Whitehead  
Quality Assurance Specialist

QUALITY ASSURANCE NOTICE

Volatile sample # 5808 required a substantial dilution in order to accurately detect and quantify compounds present at high levels. Because of this dilution factor, the level of surrogates in this sample fell below the detection limit, and are therefore reported as "BDL."

Bob Whitehead  
Quality Assurance Specialist

RECEIVED OCT 25 1983

QUALITY ASSURANCE NOTICE

The statements checked below apply to the pesticide fraction of sample # 5808. These statements apply to problems incurred with the quantitation of the surrogate, dibutyl chlorendate, or the spike compounds (QC samples only) flagged by an asterisk (\*) on the compound list.

- ☐ No DBC recovery available due to a \_\_\_\_\_ dilution factor.
- ☐ No spike recovery available due to a \_\_\_\_\_ dilution factor.
- ☐ No spike recovery available due to severe matrix interference and/or the presence of high levels of PCBs which prevent quantitation of these compounds.
- ☒ No DBC recovery due to severe matrix interference.
- ☐ Variations between duplicate samples due to non-homogenous nature of soil sample.
- ☐ No DBC recovery due to \_\_\_\_\_ dilution factor on packed/capillary (circle) and matrix interference on packed/capillary columns (circle).
- ☐ Low/high (circle) spike recoveries due to matrix interference.
- ☐ Additional Analyst/Quality Assurance Specialist comments:

initials AS

date 9/27/83

RECEIVED OCT 25 1983

QUALITY ASSURANCE NOTICE

Semivolatile sample # 5809 required a substantial dilution in order to accurately detect and quantify compounds present at high levels. Because of this dilution factor, the level of surrogates in this sample fell below the detection limit, and are therefore reported as "BDL."

Bob Whitehead  
Quality Assurance Specialist

QUALITY ASSURANCE NOTICE

Volatile sample # 5809 required a substantial dilution in order to accurately detect and quantify compounds present at high levels. Because of this dilution factor, the level of surrogates in this sample fell below the detection limit, and are therefore reported as "BDL."

Bob Whitehead  
Quality Assurance Specialist

RECEIVED OCT 25 1983

QUALITY ASSURANCE NOTICE

The statements checked below apply to the pesticide fraction of sample # 5809. These statements apply to problems incurred with the quantitation of the surrogate, dibutyl chlorendate, or the spike compounds (QC samples only) flagged by an asterisk (\*) on the compound list.

- ☐ No DBC recovery available due to a \_\_\_\_\_ dilution factor.
- ☐ No spike recovery available due to a \_\_\_\_\_ dilution factor.
- ☐ No spike recovery available due to severe matrix interference and/or the presence of high levels of PCBs which prevent quantitation of these compounds.
- ☒ No DBC recovery due to severe matrix interference.
- ☐ Variations between duplicate samples due to non-homogenous nature of soil sample.
- ☐ No DBC recovery due to \_\_\_\_\_ dilution factor on packed/capillary (circle) and matrix interference on packed/capillary columns (circle).
- ☐ Low/high (circle) spike recoveries due to matrix interference.
- ☐ Additional Analyst/Quality Assurance Specialist comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

initials   *di*  

date   10-2-83  

RECEIVED OCT 2 5 1983

Case 1887

QUALITY ASSURANCE NOTICE

The statements checked below apply to the pesticide fraction of sample # 5810. These statements apply to problems incurred with the quantitation of the surrogate, dibutyl chlorendate, or the spike compounds (QC samples only) flagged by an asterisk (\*) on the compound list.

- ☐ No DBC recovery available due to a \_\_\_\_\_ dilution factor.
- ☐ No spike recovery available due to a \_\_\_\_\_ dilution factor.
- ☐ No spike recovery available due to severe matrix interference and/or the presence of high levels of PCBs which prevent quantitation of these compounds.
- ☒ No DBC recovery due to severe matrix interference.
- ☐ Variations between duplicate samples due to non-homogenous nature of soil sample.
- ☐ No DBC recovery due to \_\_\_\_\_ dilution factor on packed/capillary (circle) and matrix interference on packed/capillary columns (circle).
- ☐ Low/high (circle) spike recoveries due to matrix interference.
- ☐ Additional Analyst/Quality Assurance Specialist comments:

initials JS

date 9/27/83

RECEIVED OCT 25 1983

Case 1887

QUALITY ASSURANCE NOTICE

The statements checked below apply to the pesticide fraction of sample # 5511. These statements apply to problems incurred with the quantitation of the surrogate, dibutyl chlorendate, or the spike compounds (QC samples only) flagged by an asterisk (\*) on the compound list.

- ☐ No DBC recovery available due to a \_\_\_\_\_ dilution factor.
- ☐ No spike recovery available due to a \_\_\_\_\_ dilution factor.
- ☐ No spike recovery available due to severe matrix interference and/or the presence of high levels of PCBs which prevent quantitation of these compounds.
- ☐ No DBC recovery due to severe matrix interference.
- ☐ Variations between duplicate samples due to non-homogenous nature of soil sample.
- ☒ No DBC recovery due to 1000 dilution factor on packed/capillary (circle) and matrix interference on packed/capillary columns (circle).
- ☐ Low/high (circle) spike recoveries due to matrix interference.
- ☐ Additional Analyst/Quality Assurance Specialist comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

initials   JCS  

date   10-10  

RECEIVED OCT 25 1983

QUALITY ASSURANCE NOTICE

The statements checked below apply to the pesticide fraction of sample # 5812. These statements apply to problems incurred with the quantitation of the surrogate, dibutyl chlorendate, or the spike compounds (QC samples only) flagged by an asterisk (\*) on the compound list.

- ☐ No DBC recovery available due to a \_\_\_\_\_ dilution factor.
- ☐ No spike recovery available due to a \_\_\_\_\_ dilution factor.
- ☐ No spike recovery available due to severe matrix interference and/or the presence of high levels of PCBs which prevent quantitation of these compounds.
- ☐ No DBC recovery due to severe matrix interference.
- ☐ Variations between duplicate samples due to non-homogenous nature of soil sample.
- ☒ No DBC recovery due to 10:1 dilution factor on packed/capillary (circle) and matrix interference on packed/capillary columns (circle).
- ☐ Low/high (circle) spike recoveries due to matrix interference.
- ☐ Additional Analyst/Quality Assurance Specialist comments:

initials SS

date 9/27/83

RECEIVED OCT 25 1983

Case 1287

# QUALITY ASSURANCE NOTICE

The statements checked below apply to the pesticide fraction of sample # 5513. These statements apply to problems incurred with the quantitation of the surrogate, dibutyl chlorendate, or the spike compounds (QC samples only) flagged by an asterisk (\*) on the compound list.

- ☐ No DBC recovery available due to a \_\_\_\_\_ dilution factor.
- ☐ No spike recovery available due to a \_\_\_\_\_ dilution factor.
- ☐ No spike recovery available due to severe matrix interference and/or the presence of high levels of PCBs which prevent quantitation of these compounds.
- ☐ No DBC recovery due to severe matrix interference.
- ☐ Variations between duplicate samples due to non-homogenous nature of soil sample.
- ☒ No DBC recovery due to 10:1 dilution factor on packed/capillary (circle) and matrix interference on packed/capillary columns (circle).
- ☐ Low/high (circle) spike recoveries due to matrix interference.
- ☐ Additional Analyst/Quality Assurance Specialist comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

initials AS

date 9/27/83

RECEIVED OCT 2 5 1983



QUALITY ASSURANCE NOTICE

Semivolatile sample # 5814 required a substantial dilution in order to accurately detect and quantify compounds present at high levels. Because of this dilution factor, the level of surrogates in this sample fell below the detection limit, and are therefore reported as "BDL."

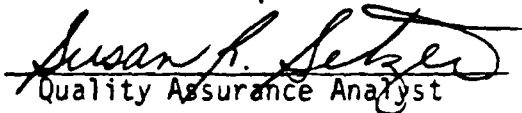
Bob Whitehead  
Quality Assurance Specialist

QUALITY ASSURANCE NOTICE

CASE# 1887

Due to a \_\_\_\_\_ dilution in the TCDD fraction of this sample, CC# 5814, EPA# E3797, no surrogate recovery data is available.

RECEIVED OCT 25 1983

  
Quality Assurance Analyst

Case 1887

# QUALITY ASSURANCE NOTICE

The statements checked below apply to the pesticide fraction of sample # 5814. These statements apply to problems incurred with the quantitation of the surrogate, dibutyl chlorendate, or the spike compounds (QC samples only) flagged by an asterisk (\*) on the compound list.

- ☒ No DBC recovery available due to a 10,000 dilution factor.
- ☐ No spike recovery available due to a \_\_\_\_\_ dilution factor.
- ☐ No spike recovery available due to severe matrix interference and/or the presence of high levels of PCBs which prevent quantitation of these compounds.
- ☐ No DBC recovery due to severe matrix interference.
- ☐ Variations between duplicate samples due to non-homogenous nature of soil sample.
- ☐ No DBC recovery due to \_\_\_\_\_ dilution factor on packed/capillary (circle) and matrix interference on packed/capillary columns (circle).
- ☐ Low/high (circle) spike recoveries due to matrix interference.
- ☐ Additional Analyst/Quality Assurance Specialist comments:

initials SS

date 9/27/83

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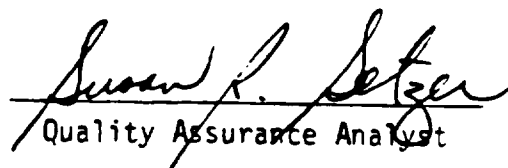
QUALITY ASSURANCE NOTICE

Semivolatile sample # 5815 required a substantial dilution in order to accurately detect and quantify compounds present at high levels. Because of this dilution factor, the level of surrogates in this sample fell below the detection limit, and are therefore reported as "BDL."

Bob Whitehead  
Quality Assurance Specialist

QUALITY ASSURANCE NOTICE  
CC #5815

Due to insufficient sample remaining, the dry weight portion of this sample was not analyzed.

  
Quality Assurance Analyst

RECEIVED OCT 25 1983

QUALITY ASSURANCE NOTICE

Volatile sample # 5815 required a substantial dilution in order to accurately detect and quantify compounds present at high levels. Because of this dilution factor, the level of surrogates in this sample fell below the detection limit, and are therefore reported as "BDL."

Bob Whitehead  
Quality Assurance Specialist

QUALITY ASSURANCE NOTICE

CC#5815

The following notice regards CompuChem's current policies concerning the evaluation of TCDD data. Any blanks with surrogate recoveries outside control limits will also be affected by these policies.

- (1) We are committed to rerun TCDD fractions if the recovery of the 1,2,3,4 TCDD surrogate drops below contract mandated levels.

Soils 11-128%

Waters 26-104%

- (2) If a TCDD rerun is required on a specific sample, the preparation process will start:

(a) With a split of the base neutral extract if B/N surrogate recoveries are within contract specified limits.

(b) With a re-extraction of the original sample if the B/N surrogates are outside of contract specified levels.

If the TCDD fraction precedes the SV fraction through the system, a re-prep should be scheduled due to the low probability of a B/N surrogate failure. If the B/N fraction is then later determined to have bad surrogate recoveries, a full re-extraction can then be performed.

- (3) If a TCDD blank has bad recoveries, the following rules will apply:

(a) All samples associated with the blank will be run, surrogate recoveries determined and the amount of native TCDD, if any, calculated.

(b) If the sample has surrogate recovery within contract specifications and does not have any native material present, it will be reported out with the appropriate QC notice.

(c) If, however, either surrogate recovery is out of the acceptable range or native TCDD is identified, the sample must be reprocessed based on the rules identified in point 2.

- (4) If native TCDD is found in the blank the entire batch must be reextracted.

- (5) Based on the rules defined in Point 2, if a group of samples are going to be reprepared from the base/neutral fraction, a new blank will be required. A CompuChem number for this blank can be obtained by using the the number 180 QC counter on the HP3000 system; a 1:20 insertion rate is required. This blank should start with 250 microliters of methylene chloride and follow all of the reprep steps.

- (6) If the second TCDD also fails to produce acceptable results we will invoice the EPA for the re-analysis of a full pesticide/TCDD fraction.

RECEIVED OCT 2 5 1983

Paul Mills  
Director, Quality Assurance

Com-1007

QUALITY ASSURANCE NOTICE

The statements checked below apply to the pesticide fraction of sample # 5855. These statements apply to problems incurred with the quantitation of the surrogate, dibutyl chlorendate, or the spike compounds (QC samples only) flagged by an asterisk (\*) on the compound list.

- ☒ No DBC recovery available due to a 1:1000 dilution factor.
- ☐ No spike recovery available due to a \_\_\_\_\_ dilution factor.
- ☐ No spike recovery available due to severe matrix interference and/or the presence of high levels of PCBs which prevent quantitation of these compounds.
- ☐ No DBC recovery due to severe matrix interference.
- ☐ Variations between duplicate samples due to non-homogenous nature of soil sample.
- ☐ No DBC recovery due to \_\_\_\_\_ dilution factor on packed/capillary (circle) and matrix interference on packed/capillary columns (circle).
- ☐ Low/high (circle) spike recoveries due to matrix interference.
- ☐ Additional Analyst/Quality Assurance Specialist comments:

initials JS

date 9-27-83

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Case 1287

QUALITY CONTROL NOTICE

Because of the high levels of PCB's in sample # 5826 & 5827, there is no pesticide spike data available for reporting. The presence of the PCB's effectively masked that of the spike compounds, preventing accurate quantitation. Duplicate data are available which confirm these results.

Bob Whitehead *RMW* 8-23-83  
Quality Control Specialist

QUALITY CONTROL NOTICE

Semivolatile sample spike # 5824 and duplicate sample spike # 5825, from the original sample # 5802, required extensive dilutions in order to accurately detect and quantify all compounds present. Because this dilution factor decreased the surrogates and spikes to levels below the detection limit, these compounds are not reported.

The acid fractions were diluted by a 20:1 factor, while the base/ neutrals were diluted 20:1.

Bob Whitehead *RMW*  
Quality Control Specialist  
Date: 8-23-83

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QUALITY ASSURANCE NOTICE

The semivolatile fraction of sample spike # 5613 and duplicate spike # 5614 exhibited unusual percent recovery values for the compound(s) listed below. These values are outside of control limits due to the non-homogenous nature of the soil sample used in preparing these spikes. This original sample (# 5607) contained the compound(s) listed below in the "non-spiked" analysis.

compound

phenol  
pentachlorophenol  
\_\_\_\_\_  
\_\_\_\_\_

Bob Whitehead *W 9-20-83*  
Quality Assurance Specialist

C# 1887

QUALITY ASSURANCE NOTICE

The semivolatile fraction of sample spike # 5824 and duplicate spike # 5825 exhibited unusual percent recovery values for the compound(s) listed below. These values are outside of control limits due to the non-homogenous nature of the soil sample used in preparing these spikes. This original sample (# 5802) contained the compound(s) listed below in the "non-spiked" analysis.

compound

1,2,4-trichlorobenzene  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

RECEIVED OCT 25 1983

Bob Whitehead *W 8-25-83*  
Quality Assurance Specialist

CAN. 1007

President

3308 East Chapel Hill/Nelson Highway  
Post Office Box 12652  
Research Triangle Park, NC 27709

Telephone: 919-549-8263  
800-334-8525

**Mead CompuChem**

July 8, 1983

Dr. Alfred Haebeler  
USEPA  
Support Services Branch (WH-548-A)  
Hazardous Response Support Division  
401 M Street, S.W.  
Washington, D.C. 20460

Dear Fred:

The new protocols for semi-volatile analysis are currently not amenable to running samples on a routine basis (IFB WA 83 A094, Contract 68-01-6762). In order to prevent buildup of delinquent samples, I have decided to revert to the calibration protocols of the previous contract on a 3-week interim basis (IFB WA 82 A155, Contract 68-01-6727). The changed surrogate and deliverable items of the new protocols will be followed. I will provide you detailed technical information documenting all problems with the new protocols within the next 10 days.

I believe this change is in the best interest of the program. However, if this is unacceptable to you, please call immediately.

Sincerely,



R. Lee Myers, Ph.D.

RLM:eh

cc: S. Kovell  
Dick Thacker - SMD  
Gareth Pearson - EMSL

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Case 1087



QUALITY ASSURANCE NOTICE: EPA CASE#.

In addition to the difficulties experienced in the analysis of semi-volatile calibration standards referenced in the attached memorandum from Dr. R. L. Myers at CompuChem to Dr. A. Haebeler, USEPA, 7/8/83, similar problems have been seen in the initial volatile calibration analyses. The Laboratory is, consistent with the semivolatiles, reverting to the calibration protocols of the previous contract for volatiles, until the criteria problems can be overcome or the criteria themselves are changed for this contract.

Paul Myers

Director, Quality Assurance July 22, 1983

The semivolatile calibration standards criteria being applied by CompuChem for Calibration Check Compounds is that the shift check standard must have for those compounds a response factor which is within the 20% difference criterion compared to the multipoint calibration standard of the same level. Again, the old protocol criteria is being applied, in which the average of the response factor differences are summed, so some individual standards response factor may be outside the 20% criteria, but the average of all may be less than 20%; this would be acceptable, and then samples would be run.

Paul Myers

Director, Quality Assurance July 22, 1983

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E/18

## SOIL SURROGATE PERCENT RECOVERY SUMMARY

CASE NO. 1887  
 LOW LEVEL XX  
 WATER  
 QC REPORT NO. \_\_\_\_\_

CONTRACTOR Mead Compuchem  
 MED. LEVEL  
 SOIL/SED. XX

CONTRACT NO. 68-01-6762  
 HIGH LEVEL  
 OTHER (Specify) \_\_\_\_\_

RECEIVED OCT 25 1983

[-----Volatile-----]							[-----Semi-Volatile-----]											[Pesticide]	[Dioxin]
SURR. I.D.	EXT. DATE	EXT. I.D.	DATE ANA.	ANAL. I.D.	CC #	SNO Traffic No.	(#233) Dg Toluene (81-120)	(#247) BFB (NE)	(#250) Dg-1,2 Dichloro Ethane (NE)	(#447) D5 Nitro Benzene (19-120)	(#448) 2-Fluoro Biphenyl (17-120)	(#471) D10 Pyrene (NE)	(#496) D14 p-ter Phenyl (NE)	(#612) D5 Phenol (10-100)	(#619) 2-Fluoro Phenol (26-120)	(#628) 2,4,6-Tribromo Phenol (NE)	(#738) Dibutyl Chlor- ondate (NE)	(#466) 1,2,3,4 TCDD (11-130)	
353	7-16 83		7-27-83	633	5800	E3783	113	105	88										
352	7-26 83		8-13-83	7163						90	92	120	74	73	85	34			
368	7-26 83		8-8-83	694													57		
364	7-29 83		8-8-83	719														16	
353					5801	E3784	① 125	110	95										
352	7-26 83		8-13-83	7163						20:1 Dilution Surr BDL									
368	7-26 83		8-11-83	694													ⓧ No rel.		
364	8-17 83		8-16-83	740														32	
					5802	E3785	Screened Medium												
352	7-26 83		8-11-83	586						100:1 Dilution - no surr all BDL							①		
368	7-26 83		8-11-83	597													**		
364			8-23	755														IND*	
					5803	E3786	① 74	72	73										
352	7-26 83		8-14-83	586						Dilution									
368	7-26 83		8-11-83	597													**		
364	7-27 83		8-8-83	719														15	
353	7-26 83		8-28-83	673	5804	E3787	95	87	88										
352	8-19 83		8-25-83	659						52	62	62	58	86	110	56			
368	7-26 83		8-11-83	597													41		
364																		IND*	

Volatiles: 1 out of 3; outside of QC limits  
 Semivolatiles: 0 out of 8; outside of QC limits  
 Dioxin: 2 out of 5; outside of QC limits

\*Asterisked values are outside of QC limits.  
 NE - Not established.

## Comments:

ⓧ = Dilution, ① G.A. Notice, \*\* No DBC Recovery due to PCB interference

Case 1887

# SOIL SURROGATE PERCENT RECOVERY SUMMARY

CASE NO. 1887  
 LOW LEVEL ✓  
 WATER ✓  
 QC REPORT NO.           

CONTRACTOR Mead Comp Chem  
 MED. LEVEL             
 SOIL/SED. XX

CONTRACT NO. 68-01-6762  
 HIGH LEVEL             
 OTHER (Specify)           

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							[-----Volatile-----]			[-----Semi-Volatile-----]					[Pesticide]		[Dioxin]	
SURR. I.D.	EXT. DATE	EXT. I.D.	DATE ANA.	ANAL. I.D.	CC #	SMD Traffic No.	D8 Toluene (#233) (81-120)	BFB (#247) (NE)	D4-1,2 Dichloro Ethane (#258) (NE)	D5 Nitro Benzene (#447) (19-120)	2-Fluoro Biphenyl (#448) (17-120)	D10 Pyrene (#471) (NE)	D14 p-Ter Phenyl (#496) (NE)	D5 Phenol (#612) (10-100)	2-Fluoro Phenol (#619) (26-120)	2,4,6-Tribrom Phenol (#628) (NE)	Dibutyl Chlor- endate (#738) (NE)	1,2,3,4 TCDD (#466) (11-130)
383	7-26 83		7-28 83	714	5805	E3788	120	110	93									
382	7-29		8-11	763						66	73	120	54	81	100	66		
368																	*D	
364	7-27 83		8-8-83	714														16
383					5806	E3789	81	90	72									
382	7-28 83		8-11 83	602						93	130*	110	150	30	42	27		
368																		
364	7-29 83		8-8-83	740														IND*
383	7-26 83		7-28 83	714 623	5807	E3700	92	96	75									
382	7-27 83		8-19 83	659						76	76	68	99	67	81	150 <sup>2</sup>		
368	7-28 83		8-22-83	644 547													61	
364	7-29 83		8-11-83	740														26
383					5808	E3791	Screened Medium											
382	7-26 83		8-11-83	763						All - BDL (D) - Dilution								
368																	*INT	
364	8-17 83		8-17-83	755														17
383					5809	E3792	Screened Medium											
382	8-16 83		8-23-83	616 586	5809 R					ALL BDL - Dilution Factor								
368	7-28 83		8-30-83	547													BDL	
364			8-4-83	719	5809													IND*

Volatiles: 0 out of 3; outside of QC limits  
 Semivolatiles: 1 out of 12; outside of QC limits  
 Dioxin: 2 out of 5; outside of QC limits

\*Asterisked values are outside of QC limits.  
 NE - Not established.

Comments: (\*) Dilution, (D) = QA Notice, (2) = see reinject fraction  
\* 5806 - NOT ENOUGH SAMPLE FOR TCDD RE-EXTRACT & ANALYSIS

\* 5808 - Interference  
\* 5805 - No recovery due to dilution  
(X) no sample remaining for re-extraction

Case 1887

# SOIL SURROGATE PERCENT RECOVERY SUMMARY

CASE NO. 1887  
LOW LEVEL ✓  
WATER  
QC REPORT NO. \_\_\_\_\_

CONTRACTOR Mead Comp Chem  
MED. LEVEL  
SOIL/SED. XX

CONTRACT NO. 68-01-6762  
HIGH LEVEL  
OTHER (Specify) \_\_\_\_\_

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-----Volatile-----							-----Semi-Volatile-----							[Pesticide]	[Dioxin]			
SURR. I.D.	EXT. DATE	EXT. I.D.	DATE ANA.	ANAL. I.D.	CC #	SNO Traffic No.	(#233) Dg Toluene (81-120)	(#247) BFB (NE)	(#258) D4-1,2 Dichloro Ethane (NE)	(#447) D5 Nitro Benzene (19-120)	(#448) 2-Fluoro Biphenyl (17-120)	(#471) D10 Pyrene (NE)	(#496) D14 p-Ter Phenyl (NE)	(#612) D5 Phenol (10-100)	(#619) 2-Fluoro Phenol (26-120)	(#628) 2,4,6- Tribromo Phenol (NE)	(#738) Dibutyl Chlor- endate (NE)	(#466) 1,2,3,4 TCDD (11-130)
383					5810	E3793	Screened Medium											
382	8-4 83		8-25-83	617	5810 A					93	100	100	110	70	120	89		
368	7-28 83		8-30-83	597													BDL	
364	7-27 83		8-9-83	714														18
383					5811	E3794	Screened Medium											
382	7-26 83		8-11-83	602						69	100	87	81	32	32	23		
368	7-28 83		8-23-83	597													BDL	
364	7-27 83		8-9-83	714														No rec.
383	7-27 83		7-28-83	633	5812	E3795	108	103	92									
382	7-26 83		8-11-83	602						92	91	66	98	63	69	50		
368	7-28 83		8-22-83	697													BDL	
364	7-27 83		8-9-83	714														23
383	7-26 83		7-28-83	633	5813	E3796	107	108	90									
382	5-26 83		8-14-83	763 659						83	94	120	70	86	110	99		
368	7-26 83		8-4-83	597													BDL	
364	7-27 83		8-4-83	714														14
383					5814	E3797	Screened Medium											
382	5-26 83		8-23-83	659						Dilution								
368	7-26 83		9-7-83	597 679													BDL	
364	8-25 83		8-25-83	763	5814 A													IND*

Volatiles: 0 out of 2; outside of QC limits  
Semivolatiles: 0 out of 16; outside of QC limits  
Dioxin: 2 out of 5; outside of QC limits

\*Asterisked values are outside of QC limits.  
NE - Not established.

Comments:

① Dilution, ② QA Notice, ③ see reinject fraction

Can. 1007

# SOIL SURROGATE PERCENT RECOVERY SUMMARY

CASE NO. 1887  
 LOW LEVEL  
 WATER  
 QC REPORT NO. \_\_\_\_\_

CONTRACTOR Mead Compu Chem  
 MED. LEVEL  
 SOIL/SED. xx

CONTRACT NO. 68-01-6762  
 HIGH LEVEL  
 OTHER (Specify) \_\_\_\_\_

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							[-----Volatile-----]			[-----Semi-Volatile-----]					[Pesticide]	[Dioxin]		
SURR. I.D.	EXT. DATE	EXT. I.D.	DATE ANA.	ANAL. I.D.	CC #	SNO Traffic No.	(#233) Dg Toluene (81-120)	(#247) BFB (NE)	(#258) Dg-1,2 Dichloro Ethane (NE)	(#447) D5 Nitro Benzene (19-120)	(#448) 2-Fluoro Biphenyl (17-120)	(#471) D10 Pyrene (NE)	(#496) D14 p-Ter Phenyl (NE)	(#612) D5 Phenol (10-100)	(#619) 2-Fluoro Phenol (26-120)	(#628) 2,4,6- Tribromo Phenol (NE)	(#738) Dibutyl Chlor- andate (NE)	(#466) 1,2,3,4 TCDD (11-130)
383					5815	E3798	Screened Medium											
382	5-26 83		8-12-83	743						x	BDL	①						
368																	* ②	
364	1-27			740														BDL
383																		
382																		
368																		
364																		
383																		
382																		
368																		
364																		
383																		
382																		
368																		
364																		
383																		
382																		
368																		
364																		

Volatiles: \_\_\_\_\_ out of \_\_\_\_\_; outside of QC limits  
 Semivolatiles: 4 out of 4; outside of QC limits  
 Dioxin: 1 out of 1; outside of QC limits

\*Asterisked values are outside of QC limits.  
 NE - Not established.

Comments: ① QA Notice

\*② 1:10000 Dilution

Can 1007

2/2

RECEIVED OCT 25 1983

[-----Volat 11]

[illegible]

\*Asterisked values are outside of QC limits.  
NE - Not established.

**Comments:**

# SOIL SURROGATE PERCENT RECOVERY SUMMARY

CASE NO. 1887  
 LOW LEVEL \_\_\_\_\_  
 WATER \_\_\_\_\_  
 QC REPORT NO. \_\_\_\_\_

CONTRACTOR Mead Compuchem  
 MED. LEVEL XX  
 SOIL/SED. XX

CONTRACT NO. 68-01-6762  
 HIGH LEVEL \_\_\_\_\_  
 OTHER (Specify) \_\_\_\_\_

RECEIVED OCT 25 1983

VOA Only - medium

[-----Volatile-----][-----Semi-Volatile-----][Pesticide][Dioxin]

SURR. I.D.	EXT. DATE	EXT. I.D.	DATE ANA.	ANAL. I.D.	CC #	SNO Traffic No.	(#233) Dg Toluene (81-120)	(#247) BFB (NE)	(#258) Dg-1,2 Dichloro Ethane (NE)	(#447) Dg Nitro Benzene (19-120)	(#448) 2-Fluoro Biphenyl (17-120)	(#471) D10 Pyrene (NE)	(#496) D14 p-ter Phenyl (NE)	(#612) Dg Phenol (10-100)	(#619) 2-Fluoro Phenol (26-120)	(#628) 2,4,6-Tribromo Phenol (NE)	(#738) Dibutyl Chlor-ondate (NE)	(#466) 1,2,3,4 TCDD (11-130)
383	7-28 93		8-2-83	673	5811	E3794	84	87	84									
383	7-28 93		1-2-83	673	5814	E3797	95	100	77									
383	7-28 83		8-3-83	633	5815	E3798	See BDL	VA Notice BDL	BDL									

Volatiles: 1 out of 3; outside of QC limits  
 Semivolatiles: 0 out of 0; outside of QC limits  
 Dioxin: 0 out of 0; outside of QC limits

\*Asterisked values are outside of QC limits.  
 NE - Not established.

Comments:

Case 1887

CASE NO. 1887  
LOW LEVEL ☒  
WATER  
QC REPORT NO. \_\_\_\_\_

CONTRACTOR Mered Compuchem  
MED. LEVEL \_\_\_\_\_  
SOIL/SED. ✓

CONTRACT NO. 68-01-6762  
HIGH LEVEL \_\_\_\_\_  
OTHER (Specify) \_\_\_\_\_

## Re Run SAMPLES

[illegible]

Volatiles: 1 out of 1; outside of QC limits  
Semivolatiles:        out of       ; outside of QC limits  
Dioxin:        out of       ; outside of QC limits

\*Asterisked values are outside of QC limits.  
NE - Not established.

**Comments :**

Case 1287



SOIL SURROGATE PERCENT RECOVERY SUMMARY

CASE NO. 1887  
 LOW LEVEL XX  
 WATER  
 QC REPORT NO. \_\_\_\_\_

CONTRACTOR MEAD  
 MED. LEVEL  
 SOIL/SED. XX

CONTRACT NO. 60-01-6762  
 HIGH LEVEL  
 OTHER (Specify) \_\_\_\_\_

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REFRNS

[-----Volatile-----][-----Semi-Volatile-----][Pesticide][Dioxin]

SURR. I.D.	EXT. DATE	EXT. I.D.	DATE ANA.	ANAL. I.D.	CC #	SNO Traffic No.	(#233) D8 Toluene (81-120)	(#247) BFB (NE)	(#258) D4-1,2 Dichloro Ethane (NE)	(#447) D5 Nitro Benzene (19-120)	(#448) 2-Fluoro Biphenyl (17-120)	(#471) D10 Pyrene (NE)	(#496) D14 p-ter Phenyl (NE)	(#612) D5 Phenol (10-100)	(#619) 2-Fluoro Phenol (26-120)	(#628) 2,4,6- Tribromo Phenol (NE)	(#738) Dibutyl Chlor- endate (NE)	(#466) 1,2,3,4 TCDD (11-130)
					5804	E3785												
364	8-23																	IND*
					5804	E3787												
					5809R	E3792												
364	8-15		8-18	719														*①
					5815R	E3798												
364			9-9	740														*IND①
					5811R	E3794												
364			9-11															ind①

Volatiles: \_\_\_\_\_ out of \_\_\_\_\_; outside of QC limits  
 Semivolatiles: \_\_\_\_\_ out of \_\_\_\_\_; outside of QC limits  
 Dioxin: 4 out of 4; outside of QC limits

\*Asterisked values are outside of QC limits.  
 NE - Not established.

Comments:

① QA NOTICE

Case 1007

# Instrument Blanks

## VOLATILES REAGENT BLANK SUMMARY

Page    of   

RECEIVED OCT 25 1983

CASE NO. 1887  
LOW LEVEL             
WATER             
QC REPORT NO.           

CONTRACTOR COMPUCHEM  
MED. LEVEL             
SOIL/SED.           

CONTRACT NO.             
HIGH LEVEL             
OTHER (SpecTfy)             
UNITS (Circle) ug/kg ug/l

FRACTION VOLATILES:	CASH NUMBER	COMPOUND	CONCENTRATION	CONTRACT DETECTION LIMITS	COMMENTS	ASSOCIATED SMD #	SAMPLES CC #
File I.D.							
GB83072X05		NONE				E3783	5800
Instrument I.D.						E3784	5801
GB83072A05		NONE				E3785	5812
						E3786	5813
VOLATILES:							
File I.D.							
GE83072X05		NONE				E3788	5805
Instrument I.D.						E3789	5807
CB830802A11		NONE				E3785	5802
						E3786	5803
						E3793	
VOLATILES:							
File I.D.							
CB830802A11		NONE				E3789	5806
Instrument I.D.						E3791	5808
CC830803C11		NONE				E3791	5808
						E3792	5809
VOLATILES:							
File I.D.							
CB830829A11		NONE				E3787	5804
Instrument I.D.							

Case 1007

VOLATILES  
REAGENT BLANK SUMMARY

Page \_\_\_ of \_\_\_

CASE NO. 1887  
LOW LEVEL  
WATER  
QC REPORT NO. \_\_\_\_\_

CONTRACTOR Mead  
MED. LEVEL XX  
SOIL/SED. XX

CONTRACT NO. 68-01-6762  
HIGH LEVEL  
OTHER (Specify) \_\_\_\_\_  
UNITS (Circle) ug/kg ug/l

RECEIVED OCT 25 1983

FRACTION	CAS# NUMBER	COMPOUND	CONCENTRATION	CONTRACT DETECTION LIMITS	COMMENTS	ASSOCIATED SMO #	SAMPLES CC #
<u>VOLATILES:</u>						<u>E3786</u>	<u>580X</u>
File I.D.	<u>6774</u>						
Instrument I.D.							
<u>VOLATILES:</u>							
File I.D.	<u>6034</u>	<u>NONE</u>				<u>E3785</u>	<u>5802, 5806</u>
Instrument I.D.						<u>E3789</u>	<u>5808-09</u>
						<u>E3791</u>	<u>E3797</u> <u>5811, 5814-15</u>
						<u>E3792</u>	<u>E3798</u>
						<u>E3794</u>	
<u>VOLATILES:</u>							
File I.D.							
Instrument I.D.							
<u>VOLATILES:</u>							
File I.D.							
Instrument I.D.							

Case, 1887

VOLATILES  
REAGENT BLANK SUMMARY

Page    of   

CASE NO. 1887  
LOW LEVEL AR  
WATER  
QC REPORT NO.           

CONTRACTOR MEAD  
MED. LEVEL  
SOIL/SED. AR

CONTRACT NO. 68-01-6762  
HIGH LEVEL  
OTHER (Specify)  
UNITS (Circle) (ug/kg) ug/l

RECEIVED OCT 25 1983

FRACTION	CASE NUMBER	COMPOUND	CONCENTRATION	CONTRACT DETECTION LIMITS	COMMENTS	ASSOCIATED SAMPLES SMO #	CC #
<u>VOLATILES:</u>						<u>E3783</u>	
File I.D. <u>6104</u>	<u>75-09-2</u>	<u>Methylene Chloride</u>	<u>1.8</u>	<u>2.5</u>		<u>E3784</u>	<u>5800-01,</u>
Instrument I.D.						<u>E3787</u>	<u>5804-05,</u>
						<u>E3788</u>	<u>5807, 5813</u>
						<u>E3790</u>	<u>5810, 5812</u>
						<u>E3793</u>	<u>E3796</u>
<u>VOLATILES:</u>						<u>E3795</u>	
File I.D.							
Instrument I.D.							
<u>VOLATILES:</u>							
File I.D.							
Instrument I.D.							
<u>VOLATILES:</u>							
File I.D.							
Instrument I.D.							

Cas, 1227

### REAGENT BLANK SUMMARY

Page of

CASE NO. 1397  
LOW LEVEL 8x  
WATER \_\_\_\_\_  
QC REPORT NO. \_\_\_\_\_

CONTRACTOR MEAD  
MED. LEVEL \_\_\_\_\_  
SOIL/SED. XX

CONTRACT NO. 68-01-6762  
HIGH LEVEL \_\_\_\_\_  
OTHER (Specify) \_\_\_\_\_  
UNITS (Circle) (ug/kg) ug/l

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[illegible]

Case 1287

## Page of

RECEIVED OCT 25 1983

CONTRACT NO. 68-01-6762  
HIGH LEVEL \_\_\_\_\_  
OTHER (Specify) \_\_\_\_\_  
UNITS (Circle) (ug/kg) ug/l

[illegible]

Case: 1227

PESTICIDE  
REAGENT BLANK SUMMARY

Page    of   

RECEIVED OCT 25 1983

CASE NO. 1887  
LOW LEVEL XX  
WATER  
QC REPORT NO.           

CONTRACTOR MEAD  
MED. LEVEL  
SOIL/SED. XX

CONTRACT NO. 68-01-6762  
HIGH LEVEL  
OTHER (Specify)  
UNITS (Circle) ug/kg ug/l

FRACTION	CAS# NUMBER	COMPOUND	CONCENTRATION	CONTRACT DETECTION LIMITS	COMMENTS	ASSOCIATED SNO #	SAMPLES CC #
PESTICIDES:							
File I.D.						<u>E3783</u>	<u>E3789</u>
<u>6025</u>		<u>NONE</u>			<u>60% RECOVERY</u>	<u>E3784</u>	<u>E3796</u>
Instrument						<u>E3785</u>	<u>E3797</u>
I.D.						<u>E3786</u>	<u>E3798</u>
						<u>E3787</u>	<u>5800 - 5806</u>
						<u>E3788</u>	<u>5813 - 5815</u>
PESTICIDES:							
File I.D.							
<u>6204</u>		<u>NONE</u>				<u>E7770</u>	<u>5807</u>
Instrument							
I.D.							
PESTICIDES:							
File I.D.							
<u>6204</u>		<u>NONE</u>			<u>22% Recovery</u>	<u>E3791</u>	<u>E3794</u>
Instrument						<u>E3792</u>	<u>E3795</u>
I.D.						<u>E3793</u>	<u>5808 - 5812</u>
PESTICIDES:							
File I.D.							
Instrument							
I.D.							

Case 1027

TCDD  
REAGENT BLANK SUMMARY

Page    of   

CASE NO. 1887  
LOW LEVEL XX  
WATER XX  
QC REPORT NO.   

CONTRACTOR MCAD  
MED. LEVEL     
SOIL/SED.   

CONTRACT NO. 68-01-6762  
HIGH LEVEL     
OTHER (Specify)     
UNITS (Circle) ug/kg ug/l

RECEIVED OCT 25 1983

FRACTION	CAS# NUMBER	COMPOUND	CONCENTRATION	CONTRACT DETECTION LIMITS	COMMENTS	ASSOCIATED SAMPLES SMO #	CC #
TCDD :							
File I.D. <u>6025</u>		<u>NONE</u>			<u>28% recovery</u>	<u>E3783</u>	<u>5800-06</u>
Instrument I.D.						<u>E3784</u>	<u>5813-15</u>
						<u>E3785</u>	<u>E3789</u>
						<u>E3786</u>	<u>E3796</u>
						<u>E3787</u>	<u>E3797</u>
						<u>E3788</u>	<u>E3798</u>
TCDD :						<u>E3791</u>	<u>5808-5812</u>
File I.D.						<u>E3792</u>	
Instrument I.D.						<u>E3793</u>	
						<u>E3794</u>	
						<u>E3795</u>	
TCDD :							
File I.D. <u>6204</u>		<u>NONE</u>			<u>14% Rec.</u>	<u>E3790</u>	<u>5807</u>
Instrument I.D.							
TCDD :							
File I.D. <u>6078</u>		<u>NONE</u>			<u>6% Rec.</u>	<u>E3797</u>	<u>5814-5815</u>
Instrument I.D.						<u>E3798</u>	

Case 1027



CASE NO. 1887  
 LOW LEVEL \_\_\_\_\_  
 WATER \_\_\_\_\_  
 QC REPORT NO. \_\_\_\_\_

CONTRACTOR HEAD COMPUCHEM  
 MED. LEVEL XX  
 SOIL/SED. XX

CONTRACT NO. 68-01-6762  
 HIGH LEVEL \_\_\_\_\_  
 OTHER (Specify) \_\_\_\_\_  
 UNITS (Circle) ug/g ug/l

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FRACTION	COMPOUND	SMO # CONC	CONC. SPIKE ADDED	CONC. MS	% REC.	CONC. MSD	% REC.	RPD	QC LIMITS*		COMMENTS
									RPD	RECOVERY	
VOA 5811 SMO # E3799	1,1-Dichloroethylene	ND	25	21	84	21	84	0	<15%	51-150	5802-03, 5806, 5808-09, 5811, 5814-15 5810 SMO # 3799
	Trichloroethylene	ND	25	21	84	21	84	0	<15%	74-130	
	Chlorobenzene	ND	25	22	88	22	88	0	<15%	67-130	
MS # E3799 MSD # E3799	Toluene	4.8	25	22	88	22	88	0	<15%	58-130	
	Benzene	ND	25	20	80	20	80	0	<15%	56-130	
B/N SMO #	1,2,4-Trichlorobenzene								<50%	38-110	
	Acenaphthene								<50%	57-120	
	2,4-Dinitrotoluene								<50%	43-110	
MS # MSD #	Di-N-Butylphthalate								<50%	13-110	
	Pyrene								<50%	25-140	
	N-Nitrosodi-N-Propylamine								<50%	34-110	
	1,4-Dichlorobenzene								<50%	33-110	
ACID SMO #	Pentachlorophenol								<40%	19-120	
	Phenol								<40%	23-80	
	2-Chlorophenol								<40%	33-110	
									<40%		
MS # MSD #	P-Chloro-M-Cresol								<40%	32-110	
	4-Nitrophenol								<40%	15-90	
PEST SMO #	Lindane								<40%	87-110	
	Heptachlor								<40%	43-120	
	Aldrin								<40%	45-110	
MS # MSD #	Dieldrin								<40%	56-120	
	Endrin								<40%	89-110	
	p,p-DDT								<40%	82-100	

\*Asterisked values are outside QC limits.

RPD: VOAs 0 out of 5; outside QC limits  
 B/N 0 out of 5; outside QC limits  
 ACID 0 out of 5; outside QC limits  
 PEST 0 out of 5; outside QC limits

RECOVERY: VOAs 0 out of 5; outside QC limits  
 B/N 0 out of 5; outside QC limits  
 ACID 0 out of 5; outside QC limits  
 PEST 0 out of 5; outside QC limits

\*Date Limits Set 12/82  
 Revision Due 6/83

Case 1887

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CASE NO. 1887 CONTRACT NO. 68-01-67162  
 LOW LEVEL XX HIGH LEVEL  
 WATER SOIL/SED. XX OTHER (Specify)  
 QC REPORT NO. (ug/kg) ug/l

FRACTION	COMPOUND	SMO #	CONC.	CONC. SPIKE	CONC. MS	% REC.	CONC. MSD	% REC.	RPD	QC LIMITS*	COMMENTS
				ADDED						RPD RECOVERY	
VOA 5813 SMO # E3796	1,1-Dichloroethylene	ND	ND	12.5	13	104	12	96	8	<15%	5807, 5812-13
	Trichloroethylene	ND	ND	12.5	9	72*	8.2	66	9	<15%	
	Chlorobenzene	ND	ND	12.5	14	112	12	96	15	<15%	
	Toluene	ND	ND	12.5	14	112	12	96	15	<15%	
	Benzene	ND	ND	12.5	13	104	12	96	8	<15%	
B/N 5802 SMO # E3785	1,2,4-Trichlorobenzene	120,000	120,000	2000	27000	-	40,000	-	-	<50%	5807-5815
	Acenaphthene	ND	ND	2000	-	-	-	-	-	<50%	See QA Notice
	2,4-Dinitrotoluene	ND	ND	2000	-	-	-	-	-	<50%	
	Di-N-Butylphthalate	ND	ND	2000	-	-	-	-	-	<50%	
	Pyrene	ND	ND	2000	-	-	-	-	-	<50%	
MS #E3785 MSD #E3785	N-Nitrosodl-N-Propylamine	ND	ND	8000	-	-	-	-	-	<50%	
	1,4-Dichlorobenzene	ND	ND	2000	LT	-	LT	-	-	<50%	
	Pentachlorophenol	ND	ND	2000	-	-	-	-	-	<40%	5807-5815
	Phenol	ND	ND	2000	-	-	-	-	-	<40%	See QA Notice
	2-Chlorophenol	ND	ND	2000	-	-	-	-	-	<40%	
MS #E3785 MSD #E3785	P-Chloro-M-Cresol	ND	ND	2000	-	-	-	-	-	<40%	SEE QA NOTICE
	4-Nitrophenol	ND	ND	12000	-	-	-	-	-	<40%	5807-5815
	Lindane	-	-	80	-	-	-	-	-	<40%	
	Heptachlor	-	-	80	-	-	-	-	-	<40%	
	Aldrin	-	-	80	-	-	-	-	-	<40%	
MS #E3785 MSD #E3785	Dieldrin	-	-	80	-	-	-	-	-	<40%	
	Endrin	-	-	80	-	-	-	-	-	<40%	
	p,p-DDT	-	-	80	-	-	-	-	-	<40%	

\*Asterisked values are outside QC limits.

RPD: VOA 0 out of 5; outside QC limits  
 B/N - out of -; outside QC limits  
 ACID - out of -; outside QC limits  
 PEST - out of -; outside QC limits

RECOVERY: VOA 1 out of 10; outside QC limits  
 B/N - out of -; outside QC limits  
 ACID - out of -; outside QC limits  
 PEST - out of -; outside QC limits

## MATRIX SPIKE DUPLICATE/RECOVERY

CASE NO. 1887  
 LOW LEVEL XX  
 WATER  
 QC REPORT NO. 123-52

CONTRACTOR MEAD COMPUCHEM  
 MED. LEVEL  
 SOIL/SED. XX

CONTRACT NO. 68-01-6762  
 HIGH LEVEL  
 OTHER (Specify)  
 UNITS (Circle) ug/kg ug/l

RECEIVED OCT 25 1983

FRACTION	COMPOUND	SMO # CONC	CONC. SPKRE ADDED	CONC. MS	% REC	CONC. MSD	% REC	RPD	QC LIMITS*		COMMENTS
									RPD	RECOVERY	
VOA 5607 SMO # E3776	1,1-Dichloroethylene	ND	12.5	18	144	17	136	6	<15%	51-150	5800-01 5804-05
	Trichloroethylene	ND	12.5	13	104	12	96	8	<15%	74-130	
	Chlorobenzene	ND	12.5	14	112	12	96	15	<15%	67-130	
MS #E3776 MSD #E3776	Toluene	ND	12.5	12	96	10	80	18*	<15%	58-130	
	Benzene	ND	12.5	12	96	10	80	18*	<15%	56-130	
B/N 5537 SMO # E3776	1,2,4-Trichlorobenzene	ND	2000	1900	95	2100	105	10	<50%	38-110	5800-06
	Acenaphthene	ND	2000	1800	90	2200	110	20	<50%	57-120	
	2,4-Dinitrotoluene	ND	2000	430	24*	NF	-*	-*	<50%	43-110	
MS #E3776 MSD #E3776	Di-N-Butylphthalate	ND	2000	1200	60	1500	75	22	<50%	13-110	
	Pyrene	ND	2000	2600	130	3300	165*	24	<50%	25-140	
	N-Nitrosodi-N-Propylamine	ND	8000	11300	133*	11000	138*	0	<50%	34-110	
	1,4-Dichlorobenzene	760	2000	2000	100	2200	110	22	<50%	33-110	
ACID 5607 SMO # E3776	Pentachlorophenol	11300	2000	17000	300*	7900	-*	-*	<40%	19-120	5800-06
	Phenol	103,000	2000	49000	-*	52000	-*	-*	<40%	23-80	
	2-Chlorophenol	290	2000	1800	70	1700	75	22	<40%	33-110	
	P-Chloro-M-Cresol	ND	2000	2200	110	2000	100	10	<40%	32-110	
MS #E3776 MSD #E3776	4-Nitrophenol	ND	12000	300	67	800	-*	-*	<40%	15-90	
PEST 5605 SMO # E3774	Lindane	ND	80	NF	-*	NF	-*	-*	<40%	87-110	5800-06
	Heptachlor	ND	80	110.3	138*	193	241*	54*	<40%	43-120	
	Aldrin	ND	80	126	158*	NF	-*	-*	<40%	45-110	
MS #E3774	Dieldrin	ND	80	11.6	15*	NF	-*	-*	<40%	56-120	
MSD #E3774	Endrin	ND	80	110.7	138*	NF	-*	-*	<40%	89-110	
	p,p-DDT	ND	80	NF	-*	NF	-*	-*	<40%	82-100	

\*Asterisked values are outside QC limits.

RPD: VOAs 2 out of 5; outside QC limits  
 B/N 1 out of 7; outside QC limits  
 ACID 3 out of 5; outside QC limits  
 PEST 4 out of 6; outside QC limits

RECOVERY: VOAs 1 out of 10; outside QC limits  
 B/N 5 out of 12; outside QC limits  
 ACID 5 out of 10; outside QC limits  
 PEST 12 out of 18; outside QC limits

\*Date Limits Set 12/82  
 Revision Due 6/83

## SEMI-VOLATILE INSTRUMENT TUNE AND PERFORMANCE

CASE NO. 1887  
 LOW LEVEL             
 WATER           

CONTRACTOR Mead CompuChem  
 MED. LEVEL             
 SOIL/SED.           

CONTRACT NO. 68-01-6762  
 HIGH LEVEL             
 OTHER (Specify)           

DFTPP File Name: DH530510B15  
 Date: 8-10-83 Shift: 3 Analyst: 723

Mass	DFTPP Ion Abundance Criteria	% Relative Abundance
51	30 - 60 percent of mass 198	57%
68	less than 2 percent of mass 69	<.1%
70	less than 2 percent of mass 69	<.1%
127	40 - 60 percent of mass 198	47%
197	less than 1 percent of mass 198	0.3%
198	base peak, 100 percent	100%
199	5 - 9 per cent of mass 198	6.7%
275	10 - 30 percent of mass 198	22%
365	greater than 1 percent of mass 198	2.0%
441	present but less mass than 443	13%
442	greater than 40 percent of mass 198	92%
443	17 - 23 percent of mass 442	17% (18.8%)*

## DFTPP and BFB Performance Results:

☐ The DFTPP performance results were reviewed and found to be within the specified criteria.

Initials

Date

☐ Deviations

Date/Time/Instrument	File Number	Compound	m/z	Required Abundance	Observed Abundance

Initials

Date

## Comments:

Pentachlorophenol Response Factor =  $\frac{40}{\text{Area 188}} \times \frac{\text{Area 266}}{50} = \boxed{.15}$

Benzidine Detectable ☒ Yes ☐ No

Area (Counts) 40 ng D10 Anthracene = 89308

Di-N-Butyl Phthalate Saturated ☐ Yes ☒ No

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\* Figure in ( ) is % of mass 442

FORM VII

Revision Date 7/83

JF

Case 1887

# SEMI-VOLATILE INSTRUMENT TUNE AND PERFORMANCE

CASE NO. 1887  
 LOW LEVEL \_\_\_\_\_  
 WATER \_\_\_\_\_

CONTRACTOR Mead CompuChem  
 MED. LEVEL \_\_\_\_\_  
 SOIL/SED. \_\_\_\_\_

CONTRACT NO. 68-01-6762  
 HIGH LEVEL \_\_\_\_\_  
 OTHER (Specify) \_\_\_\_\_

DFTPP File Name: 04830811014

Date: 8-11-83

Shift: 0

Analyst: GOZ

Mass	DFTPP Ion Abundance Criteria	% Relative Abundance
51	30 - 60 percent of mass 198	56%
68	less than 2 percent of mass 69	0%
70	less than 2 percent of mass 69	0%
127	40 - 60 percent of mass 198	41%
197	less than 1 percent of mass 198	0%
198	base peak, 100 percent	100%
199	5 - 9 per cent of mass 198	8%
275	10 - 30 percent of mass 198	21%
365	greater than 1 percent of mass 198	2%
441	present but less mass than 443	9%
442	greater than 40 percent of mass 198	60%
443	17 - 23 percent of mass 442	12% (20%)*

## DFTPP and BFB Performance Results:

☐ The DFTPP performance results were reviewed and found to be within the specified criteria.

Initials \_\_\_\_\_

Date \_\_\_\_\_

☐ Deviations

Date/Time/Instrument	File Number	Compound	m/z	Required Abundance	Observed Abundance

Initials \_\_\_\_\_

Date \_\_\_\_\_

## Comments:

Pentachlorophenol Response Factor =  $\frac{40}{\text{Area 188}} \times \frac{\text{Area 266}}{50} =$  .10

Benzidine Detectable ☒ Yes ☐ No

Area (Counts) 40 ng D10 Anthracene = 28480

Di-N-Butyl Phthalate Saturated ☐ Yes ☒ No

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\* Figure in ( ) is % of mass 442

## SEMI-VOLATILE INSTRUMENT TUNE AND PERFORMANCE

CASE NO. 1887  
 LOW LEVEL \_\_\_\_\_  
 WATER \_\_\_\_\_

CONTRACTOR Mead CompuChem  
 MED. LEVEL \_\_\_\_\_  
 SOIL/SED. \_\_\_\_\_

CONTRACT NO. 68-01-6762  
 HIGH LEVEL \_\_\_\_\_  
 OTHER (Specify) \_\_\_\_\_

DFTPP File Name: 04830811 B15  
 Date: 8-11-83 Shift: B Analyst: 602

Mass	DFTPP Ion Abundance Criteria	% Relative Abundance
51	30 - 60 percent of mass 198	41%
68	less than 2 percent of mass 69	0%
70	less than 2 percent of mass 69	0%
127	40 - 60 percent of mass 198	45%
197	less than 1 percent of mass 198	0%
198	base peak, 100 percent	100%
199	5 - 9 per cent of mass 198	7%
275	10 - 30 percent of mass 198	22%
365	greater than 1 percent of mass 198	1%
441	present but less mass than 443	12%
442	greater than 40 percent of mass 198	87%
443	17 - 23 percent of mass 442	15% (170%)*

## DFTPP and BFB Performance Results:

☐ The DFTPP performance results were reviewed and found to be within the specified criteria.

Initials

Date



## Deviations

Date/Time/Instrument

File Number

Compound

m/z

Required  
AbundanceObserved  
Abundance

Initials

Date

## Comments:

Pentachlorophenol Response Factor =  $\frac{40}{\text{Area } 188} \times \frac{\text{Area } 266}{50} = \boxed{.24}$

Benzidine Detectable ☒ Yes ☐ No

Area (Counts) 40 ng D10 Anthracene = 56709

Di-N-Butyl Phthalate Saturated ☐ Yes ☒ No

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\* Figure in ( ) is % of mass 442

FORM VII

Revision Date 7/83

JF

Case 1887

## SEMI-VOLATILE INSTRUMENT TUNE AND PERFORMANCE

CASE NO. 1887  
 LOW LEVEL             
 WATER           

CONTRACTOR Mead CompuChem  
 MED. LEVEL             
 SOIL/SED.           

CONTRACT NO. 68-01-6762  
 HIGH LEVEL             
 OTHER (Specify)           

DFTPP File Name: 04830811B16Date: 8-11-83Shift: BAnalyst: 602

Mass	DFTPP Ion Abundance Criteria	% Relative Abundance
51	30 - 60 percent of mass 198	59%
68	less than 2 percent of mass 69	0%
70	less than 2 percent of mass 69	0%
127	40 - 60 percent of mass 198	58%
197	less than 1 percent of mass 198	0%
198	base peak, 100 percent	100%
199	5 - 9 per cent of mass 198	7%
275	10 - 30 percent of mass 198	29%
365	greater than 1 percent of mass 198	4%
441	present but less mass than 443	14%
442	greater than 40 percent of mass 198	99%
443	17 - 23 percent of mass 442	19% ( 19% )*

## DFTPP and BFB Performance Results:

☐ The DFTPP performance results were reviewed and found to be within the specified criteria.

Initials

Date

Deviations	Date/Time/Instrument	File Number	Compound	m/z	Required Abundance	Observed Abundance

Initials

Date

## Comments:

Pentachlorophenol Response Factor =  $\frac{40}{\text{Area } 188} \times \frac{\text{Area } 266}{50} =$  .06

Benzidine Detectable ☒ Yes ☐ NoArea (Counts) 40 ng D10 Anthracene = 17800Di-N-Butyl Phthalate Saturated ☐ Yes ☒ No

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\* Figure in (       ) is % of mass 442

FORM VII

Revision Date 7/83

J3

Case 1887

## SEMI-VOLATILE INSTRUMENT TUNE AND PERFORMANCE

CASE NO. 1887  
 LOW LEVEL \_\_\_\_\_  
 WATER \_\_\_\_\_

CONTRACTOR Mead CompuChem  
 MED. LEVEL \_\_\_\_\_  
 SOIL/SED. \_\_\_\_\_

CONTRACT NO. 68-01-6762  
 HIGH LEVEL \_\_\_\_\_  
 OTHER (Specify) \_\_\_\_\_

DFTPP File Name: DH830812C16  
 Date: 8-12-83 Shift: C Analyst: 763

Mass	DFTPP Ion Abundance Criteria	% Relative Abundance
51	30 - 60 percent of mass 198	50.6
68	less than 2 percent of mass 69	—
70	less than 2 percent of mass 69	—
127	40 - 60 percent of mass 198	48.3
197	less than 1 percent of mass 198	—
198	base peak, 100 percent	100.0
199	5 - 9 per cent of mass 198	—
275	10 - 30 percent of mass 198	23.6
365	greater than 1 percent of mass 198	3.2
441	present but less mass than 443	10.8
442	greater than 40 percent of mass 198	78.4
443	17 - 23 percent of mass 442	13.9 ( 18% )*

## DFTPP and BFB Performance Results:

☐ The DFTPP performance results were reviewed and found to be within the specified criteria.

\_\_\_\_\_  
 Initials Date

☐ Deviations  
Date/Time/Instrument File Number Compound m/z Required Abundance Observed Abundance

\_\_\_\_\_  
 \_\_\_\_\_

\_\_\_\_\_  
 Initials Date

## Comments:

Pentachlorophenol Response Factor =  $\frac{40}{\text{Area 188}} \times \frac{\text{Area 266}}{50} = .14$

Benzidine Detectable ☒ Yes ☐ No

Area (Counts) 40 ng D10 Anthracene = 96,116

Di-N-Butyl Phthalate Saturated ☐ Yes ☐ No

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\* Figure in ( ) is % of mass 442

FO...  
 Case 1887

Revision Date 7/83



## SEMI-VOLATILE INSTRUMENT TUNE AND PERFORMANCE

CASE NO. 1887  
 LOW LEVEL \_\_\_\_\_  
 WATER \_\_\_\_\_

CONTRACTOR Mead CompuChem  
 MED. LEVEL \_\_\_\_\_  
 SOIL/SED. \_\_\_\_\_

CONTRACT NO. 68-01-6762  
 HIGH LEVEL \_\_\_\_\_  
 OTHER (Specify) \_\_\_\_\_

DFTPP File Name: DH830812 B14  
 Date: 8-12-83 Shift: 13 Analyst: 727

Mass	DFTPP Ion Abundance Criteria	% Relative Abundance
51	30 - 60 percent of mass 198	60%
68	less than 2 percent of mass 69	1.49%
70	less than 2 percent of mass 69	< 1%
127	40 - 60 percent of mass 198	43%
197	less than 1 percent of mass 198	< .1%
198	base peak, 100 percent	100%
199	5 - 9 per cent of mass 198	7.5%
275	10 - 30 percent of mass 198	19%
365	greater than 1 percent of mass 198	1.6%
441	present but less mass than 443	10%
442	greater than 40 percent of mass 198	66%
443	17 - 23 percent of mass 442	11% ( 12% )*

## DFTPP and BFB Performance Results:

☐ The DFTPP performance results were reviewed and found to be within the specified criteria.

Initials

Date

☐ Deviations

Date/Time/Instrument	File Number	Compound	m/z	Required Abundance	Observed Abundance
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Initials

Date

## Comments:

Pentachlorophenol Response Factor =  $\frac{40}{\text{Area 188}} \times \frac{\text{Area 266}}{50} = \boxed{.15}$

Benzidine Detectable ☐ Yes ☐ No

Area (Counts) 40 ng D10 Anthracene =

Di-N-Butyl Phthalate Saturated ☐ Yes ☒ No

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\* Figure in ( ) is % of mass 442

FORM VII

Revision Date 7/83

JR

Case 1887





CONTRACT NO. 68-01-6762  
HIGH LEVEL \_\_\_\_\_  
OTHER (Specify) \_\_\_\_\_

DFTPP File Name: **DHB308/9A14**

DFTPP and BFB Performance Results:

☒ The DFTPP performance results were reviewed and found to be within the specified criteria.

BP 8/19/83  
Initials Date

☐ Deviations

<u>Date/Time/Instrument</u>	<u>File Number</u>	<u>Compound</u>	<u>m/z</u>	<u>Required Abundance</u>	<u>Observed Abundance</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

                                           
Initials Date

Pentachlorophenol Response Factor =  $\frac{40}{\text{Area 188}} \times \frac{\text{Area 266}}{50} = 0.1$

Benzidine Detectable ☒ Yes ☐ No

Area (Counts) 40 ng D10 Anthracene = 39/57

Di-N-Butyl Phthalate Saturated ☐ Yes ☒ No

\* Figure in ( ) is % of mass 442

Case 1887



CASE NO. \_\_\_\_\_  
 LOW LEVEL \_\_\_\_\_  
 WATER \_\_\_\_\_

CONTRACTOR Mead CompuChem  
 MED. LEVEL \_\_\_\_\_  
 SOIL/SED. \_\_\_\_\_

CONTRACT NO. 68-01-6762  
 HIGH LEVEL \_\_\_\_\_  
 OTHER (Specify) \_\_\_\_\_

DFTPP File Name: DH530812B16Date: 8-12-83Shift: BAnalyst: 727

Mass	DFTPP Ion Abundance Criteria	% Relative Abundance
51	30 - 60 percent of mass 198	59%
68	less than 2 percent of mass 69	< .1%
70	less than 2 percent of mass 69	< .1%
127	40 - 60 percent of mass 198	55%
197	less than 1 percent of mass 198	< .1%
198	base peak, 100 percent	100%
199	5 - 9 per cent of mass 198	7.7%
275	10 - 30 percent of mass 198	24%
365	greater than 1 percent of mass 198	3.3%
441	present but less mass than 443	11%
442	greater than 40 percent of mass 198	68%
443	17 - 23 percent of mass 442	13% (19%)*

DFTPP and BFB Performance Results:

☐ The DFTPP performance results were reviewed and found to be within the specified criteria.

\_\_\_\_\_  
Initials\_\_\_\_\_  
Date

☐ Deviations

Date/Time/Instrument	File Number	Compound	m/z	Required Abundance	Observed Abundance
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

\_\_\_\_\_  
Initials\_\_\_\_\_  
DateComments:

Pentachlorophenol Response Factor =  $\frac{40}{\text{Area 188}} \times \frac{\text{Area 266}}{50} = \boxed{.08}$

Benzidine Detectable ☒ Yes ☐ No

Area (Counts) 40 ng D10 Anthracene = 33242

Di-N-Butyl Phthalate Saturated ☐ Yes ☒ No

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\* Figure in ( ) is % of mass 442

FORM VII

Revision Date 7/83

JR

Case 1887

## SEMI-VOLATILE INSTRUMENT TUNE AND PERFORMANCE

CASE NO. 1887 CONTRACTOR Mead CompuChem CONTRACT NO. 68-01-6762  
 LOW LEVEL \_\_\_\_\_ MED. LEVEL \_\_\_\_\_ HIGH LEVEL \_\_\_\_\_  
 WATER \_\_\_\_\_ SOIL/SED. \_\_\_\_\_ OTHER (Specify) \_\_\_\_\_

DFTPP File Name: DH830823A16  
 Date: 8/23/83 Shift: A Analyst: 531

Mass	DFTPP Ion Abundance Criteria	% Relative Abundance
51	30 - 60 percent of mass 198	HO
68	less than 2 percent of mass 69	—
70	less than 2 percent of mass 69	—
127	40 - 60 percent of mass 198	57.
197	less than 1 percent of mass 198	—
198	base peak, 100 percent	100
199	5 - 9 per cent of mass 198	6
275	10 - 30 percent of mass 198	18
365	greater than 1 percent of mass 198	1.0
441	present but less mass than 443	7
442	greater than 40 percent of mass 198	54.86
443	17 - 23 percent of mass 442	9.57. (17.44)*

## DFTPP and BFB Performance Results:

☒ The DFTPP performance results were reviewed and found to be within the specified criteria.

AC 8/23/83  
 Initials Date

Deviations	Date/Time/Instrument	File Number	Compound	m/z	Required Abundance	Observed Abundance

Initials Date

## Comments:

Pentachlorophenol Response Factor =  $\frac{40}{\text{Area 188}} \times \frac{\text{Area 266}}{50} = 0.09$

Benzidine Detectable ☒ Yes ☐ No  
 Area (Counts) 40 ng D10 Anthracene = 39728.  
 Di-N-Butyl Phthalate Saturated ☐ Yes ☒ No

RECEIVED OCT 25 1983

\* Figure in ( ) is % of mass 442

FORM VII

Revision Date 7/83

JR

Case 1887

CASE NO. \_\_\_\_\_  
LOW LEVEL \_\_\_\_\_  
WATER \_\_\_\_\_

CONTRACTOR Mead CompuChem  
MED. LEVEL \_\_\_\_\_  
SOIL/SED. \_\_\_\_\_

CONTRACT NO. 68-01-6762  
HIGH LEVEL \_\_\_\_\_  
OTHER (Specify) \_\_\_\_\_

DFTPP File Name: PH830825C16  
Date: 8-25-83 Shift: C Analyst: 817

Mass	DFTPP Ion Abundance Criteria	% Relative Abundance
51	30 - 60 percent of mass 198	57
68	less than 2 percent of mass 69	0
70	less than 2 percent of mass 69	0
127	40 - 60 percent of mass 198	56
197	less than 1 percent of mass 198	0
198	base peak, 100 percent	100°
199	5 - 9 per cent of mass 198	6.7
275	10 - 30 percent of mass 198	18
365	greater than 1 percent of mass 198	2
441	present but less mass than 443	5.5
442	greater than 40 percent of mass 198	43
443	17 - 23 percent of mass 442	7.4 (17.)*

**DFTPP and BFB Performance Results:**

☐ The DFTPP performance results were reviewed and found to be within the specified criteria.

Initials \_\_\_\_\_

Date \_\_\_\_\_

Deviations	File Number	Compound	m/z	Required Abundance	Observed Abundance
Date/Time/Instrument					
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Initials \_\_\_\_\_

Date \_\_\_\_\_

**Comments:**

Pentachlorophenol Response Factor =  $\frac{40}{\text{Area 188}} \times \frac{\text{Area 266}}{50} =$  ☐

Benzidine Detectable ☐ Yes ☐ No

Area (Counts) 40 ng D10 Anthracene =

Di-N-Butyl Phthalate Saturated ☐ Yes ☐ No

RECEIVED OCT 25 1983

\* Figure in ( ) is % of mass 442

FORM VII

Revision Date 7/83

JR

Case 1887



## VOLATILE INSTRUMENT TUNE AND PERFORMANCE

CA 5800-E3783

5801-E3784

CASE NO. 1887  
LOW LEVEL ✓  
WATER           CONTRACTOR Mead CompuChem  
MED. LEVEL ✓  
SOIL/SED. ✓CONTRACT NO. 68-01-6762  
HIGH LEVEL             
OTHER (Specify)           Date: 7/27/83 BFB File Name: BF830727C05  
Shift: C Analyst: 714

Mass	<u>BFB</u> Ion Abundance Criteria	% Relative Abundance	
50	15 - 40 percent of mass 95	24	
75	30 - 60 percent of mass 95	47	
95	base peak, 100 percent	100	
96	5 - 9 percent of mass 95	8.9	
173	less than 2 percent of mass 174	0	
174	greater than 50 percent of mass 95	77	
175	5 - 9 percent of mass 174	5.0	( 6.5 ) <sup>1</sup>
176	greater than 95 percent, but less than 101 percent of 174	77	
177	5 - 9 percent of mass 176	5.2	( 6.8 ) <sup>2</sup>

BFB Performance Results:☐ The BFB performance results were reviewed and found to be within the specified criteria.\_\_\_\_\_  
Initials\_\_\_\_\_  
Date☐ Deviations  

<u>Date/Time/Instrument</u>	<u>File Number</u>	<u>Compound</u>	<u>m/z</u>	<u>Required Abundance</u>	<u>Observed Abundance</u>
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_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

\_\_\_\_\_  
Initials\_\_\_\_\_  
DateComments:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_<sup>1</sup> Value in (        ) is % of mass 174<sup>2</sup> Value in (        ) is % of mass 176

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FORM VII

Revision Date 7/83 JRT

Case 1887

## VOLATILE INSTRUMENT TUNE AND PERFORMANCE

CL# 5806-E3788  
5807-E3790  
5810-E3793

CASE NO. 1887  
LOW LEVEL ✓  
WATER           

CONTRACTOR Mead CompuChem  
MED. LEVEL ✓  
SOIL/SED.           

CONTRACT NO. 68-01-6762 5807R-E3790  
HIGH LEVEL             
OTHER (Specify)           

Date: 7/29/83 BFB File Name: DF830728C05  
Shift: C Analyst: 714

Mass	<u>BFB</u> Ion Abundance Criteria	% Relative Abundance	
50	15 - 40 percent of mass 95	<u>26</u>	
75	30 - 60 percent of mass 95	<u>48</u>	
95	base peak, 100 percent	<u>100</u>	
96	5 - 9 percent of mass 95	<u>8.6</u>	
173	less than 2 percent of mass 174	<u>0</u>	
174	greater than 50 percent of mass 95	<u>84</u>	
175	5 - 9 percent of mass 174	<u>6.5</u>	<u>( 7.7 )<sup>1</sup></u>
176	greater than 95 percent, but less than 101 percent of 174	<u>84</u>	
177	5 - 9 percent of mass 176	<u>5.7</u>	<u>( 6.8 )<sup>2</sup></u>

## BFB Performance Results:

☐ The BFB performance results were reviewed and found to be within the specified criteria.

Initials

Date

☐ Deviations  
Date/Time/Instrument    File Number    Compound    m/z    Required Abundance    Observed Abundance

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Initials

Date

Comments:

<sup>1</sup> Value in (        ) is % of mass 174

<sup>2</sup> Value in (        ) is % of mass 176

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FORM VII

Revision Date 7/83 JRT

Case 1887

CASE NO. 1887  
 LOW LEVEL \_\_\_\_\_  
 WATER \_\_\_\_\_

CONTRACTOR Mead CompuChem  
 MED. LEVEL \_\_\_\_\_  
 SOIL/SED. \_\_\_\_\_

CONTRACT NO. 68-01-6762  
 HIGH LEVEL \_\_\_\_\_  
 OTHER (Specify) \_\_\_\_\_

Date: 7/28/83 BFB File Name: BFB30728A05  
 Shift: A Analyst: 633

Mass	<u>BFB</u> <u>Ion Abundance Criteria</u>	<u>% Relative Abundance</u>
50	15 - 40 percent of mass 95	23
75	30 - 60 percent of mass 95	49
95	base peak, 100 percent	100
96	5 - 9 percent of mass 95	84
173	less than 2 percent of mass 174	28
174	greater than 50 percent of mass 95	82
175	5 - 9 percent of mass 174	5.9 (7.2) <sup>1</sup>
176	greater than 95 percent, but less than 101 percent of 174	81
177	5 - 9 percent of mass 176	5.8 (7.2) <sup>2</sup>

## BFB Performance Results:

☐ The BFB performance results were reviewed and found to be within the specified criteria.

\_\_\_\_\_  
 Initials Date

☐ Deviations  
Date/Time/Instrument File Number Compound m/z Required Abundance Observed Abundance

\_\_\_\_\_  
 \_\_\_\_\_

\_\_\_\_\_  
 Initials Date

Comments:

1 Value in ( ) is % of mass 174

2 Value in ( ) is % of mass 176

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FORM VII

Revision Date 7/83 JRT

Case 1887

# VOLATILE INSTRUMENT TUNE AND PERFORMANCE

CASE NO. \_\_\_\_\_ CONTRACTOR Mead CompuChem CONTRACT NO. 68-01-6762  
 LOW LEVEL \_\_\_\_\_ MED. LEVEL \_\_\_\_\_ HIGH LEVEL \_\_\_\_\_  
 WATER \_\_\_\_\_ SOIL/SED. \_\_\_\_\_ OTHER (Specify) \_\_\_\_\_

Date: 8/29/83 BFB File Name: BFB30829A11 Shift: A Analyst: 633

Mass	<u>BFB</u> Ion Abundance Criteria	% Relative Abundance
50	15 - 40 percent of mass 95	22
75	30 - 60 percent of mass 95	41
95	base peak, 100 percent	100
96	5 - 9 percent of mass 95	7.4
173	less than 2 percent of mass 174	42%
174	greater than 50 percent of mass 95	66
175	5 - 9 percent of mass 174	4.5 (6.8) <sup>1</sup>
176	greater than 95 percent, but less than 101 percent of 174	65
177	5 - 9 percent of mass 176	5.0 (7.7) <sup>2</sup>

## BFB Performance Results:

☐ The BFB performance results were reviewed and found to be within the specified criteria.

		<u>Initials</u>		<u>Date</u>	
<div></div>	<u>Deviations</u>				
<u>Date/Time/Instrument</u>	<u>File Number</u>	<u>Compound</u>	<u>m/z</u>	<u>Required Abundance</u>	<u>Observed Abundance</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
		<u>Initials</u>		<u>Date</u>	

Comments:

<sup>1</sup> Value in ( ) is % of mass 174

<sup>2</sup> Value in ( ) is % of mass 176

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FORM VII

Revision Date 7/83 JRT

Case 1887

CASE NO. 1887  
LOW LEVEL \_\_\_\_\_  
WATER \_\_\_\_\_

CONTRACTOR Mead CompuChem  
MED. LEVEL \_\_\_\_\_  
SOIL/SED. \_\_\_\_\_

CONTRACT NO. 68-01-6762  
HIGH LEVEL \_\_\_\_\_  
OTHER (Specify) \_\_\_\_\_

BFB File Name: BF830802A11  
Date: 8/2/83 Shift: A Analyst: 633

Mass	<u>BFB</u> Ion Abundance Criteria	% Relative Abundance
50	15 - 40 percent of mass 95	25
75	30 - 60 percent of mass 95	45
95	base peak, 100 percent	100
96	5 - 9 percent of mass 95	8.3
173	less than 2 percent of mass 174	<2%
174	greater than 50 percent of mass 95	73
175	5 - 9 percent of mass 174	5.4 ( 7.4 ) <sup>1</sup>
176	greater than 95 percent, but less than 101 percent of 174	72
177	5 - 9 percent of mass 176	5.0 ( 6.9 ) <sup>2</sup>

BFB Performance Results:

☐ The BFB performance results were reviewed and found to be within the specified criteria.

\_\_\_\_\_  
Initials

\_\_\_\_\_  
Date

<input type="checkbox"/> Deviations	Date/Time/Instrument	File Number	Compound	m/z	Required Abundance	Observed Abundance

\_\_\_\_\_  
Initials

\_\_\_\_\_  
Date

Comments:

1 Value in (       ) is % of mass 174

2 Value in (       ) is % of mass 176

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FORM VII

Revision Date 7/83 JRT

Case 1887

# VOLATILE INSTRUMENT TUNE AND PERFORMANCE

CASE NO. \_\_\_\_\_ CONTRACTOR Mead CompuChem CONTRACT NO. 68-01-6762  
 LOW LEVEL \_\_\_\_\_ MED. LEVEL \_\_\_\_\_ HIGH LEVEL \_\_\_\_\_  
 WATER \_\_\_\_\_ SOIL/SED. \_\_\_\_\_ OTHER (Specify) \_\_\_\_\_

Date: 8/2/83 BFB File Name: BF830802811 Shift: 8 Analyst: 8/2/83

Mass	<u>BFB</u> <u>Ion Abundance Criteria</u>	<u>% Relative Abundance</u>
50	15 - 40 percent of mass 95	24.50
75	30 - 60 percent of mass 95	45.43
95	base peak, 100 percent	100.00
96	5 - 9 percent of mass 95	8.79
173	less than 2 percent of mass 174	- 0 -
174	greater than 50 percent of mass 95	75.50
175	5 - 9 percent of mass 174	5.17 ( 6.8 ) <sup>1</sup>
176	greater than 95 percent, but less than 101 percent of 174	73.24
177	5 - 9 percent of mass 176	4.62 ( 6.3 ) <sup>2</sup>

## BFB Performance Results:

☐ The BFB performance results were reviewed and found to be within the specified criteria.

\_\_\_\_\_  
Initials Date

☐ Deviations  
Date/Time/Instrument File Number Compound m/z Required Abundance Observed Abundance

\_\_\_\_\_  
 \_\_\_\_\_

\_\_\_\_\_  
Initials Date

## Comments:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

<sup>1</sup> Value in ( ) is % of mass 174

<sup>2</sup> Value in ( ) is % of mass 176

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FORM VII

Revision Date 7/83 JRT

Case 1887

# VOLATILE INSTRUMENT TUNE AND PERFORMANCE

CASE NO. 1887  
 LOW LEVEL ✓  
 WATER ✓

CONTRACTOR Mead CompuChem  
 MED. LEVEL                       
 SOIL/SED.                     

CONTRACT NO. 68-01-6762  
 HIGH LEVEL                       
 OTHER (Specify)                     

Date: 8/3/87 BFB File Name: BF830803C4  
 Shift: C Analyst: 214

Mass	BFB Ion Abundance Criteria	% Relative Abundance
50	15 - 40 percent of mass 95	26
75	30 - 60 percent of mass 95	48
95	base peak, 100 percent	100
96	5 - 9 percent of mass 95	8.5
173	less than 2 percent of mass 174	0
174	greater than 50 percent of mass 95	72
175	5 - 9 percent of mass 174	5.7 ( 8.0 ) <sup>1</sup>
176	greater than 95 percent, but less than 101 percent of 174	72
177	5 - 9 percent of mass 176	5.06 ( 7.0 ) <sup>2</sup>

## BFB Performance Results:

☐ The BFB performance results were reviewed and found to be within the specified criteria.

\_\_\_\_\_  
Initials Date

☐ Deviations

Date/Time/Instrument	File Number	Compound	m/z	Required Abundance	Observed Abundance

\_\_\_\_\_  
Initials Date

Comments:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

1 Value in (        ) is % of mass 174

2 Value in (        ) is % of mass 176

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FORM VII

Revision Date 7/83 JRT

Case 1887